

## RADIO IN THE HOME

Another hook-up for two variometers, a variable condenser and a variocoupler

### Another Regenerative Hook-Up

To nine persons out of ten who get well into this radio craze and become what we ordinarily know as "bugs," the mere listening to the broadcasting concerts has very little thrill and the great joy of radio arrives with a tableful of miscellaneous apparatus, most of it probably home-made and not at all expensive, and a scrapbook made up of a great collection of diagrams of hook-ups gathered from dozens of different sources.

Operating the radio set then becomes real joy.

Not long ago a friend of mine came to my experimental station four or five times in one month in order to listen to a radio concert, and each time he found me in the midst of unhooking my set preparatory to trying some new arrangement that I had come across.

There is no one hook-up that is best for every purpose and aerial and every location. Whenever a hook-up is designed to receive everything that is flying through the ether, you will know that you have a set which has had to sacrifice a certain amount of efficiency somewhere in order to be generally practicable.

These different hook-ups are not, of course, of particular interest to the man who simply wants to hear the broadcast concerts, but, as most of you will inevitably later develop into real bugs, it is just as well at the very beginning to start making a scrapbook of all the hook-ups you find and when your operating room has become cluttered up with so much junk that it looks like the sales room of a dealer in second-hand apparatus, you will enter into the real heaven of the radio fan and get the full joy of this wonderful new science.

One of my most prized possessions is a big bundle of notepaper made up of sheets that whenever I jot down night after night while trying these different hook-ups. I give each hook-up in my scrapbook a number and when I sit down at my table to test it out, I jot down the number on the top of each sheet of the notepaper which is on my table, then I rule off columns and lines and tune in some station. As soon as I get it strongest I make a note in a column headed "audibility" of the strength with which it comes in.

This audibility scale, which I range from 0 to 10, cannot be exact, but it is near enough to be very interesting. Under the 0 classification, I place the station whose call letters I can just barely make out with the aid of my imagination and enough sound in the telephone to enable me to identify it after I have heard it a number of times.

Under the 10 classification I place the signals which come in so strong that they actually rattle down night after night unpleasantly in the ears. No. 5 is the signal which comes in with fairly good satisfaction. Other intensities of sound are graded in between according to my judgment.

Under other column headings on the record I enter the dial settings of the various parts as they were when I got best results.

Naturally the usefulness of such a system is very largely increased when you acquire sufficient acquaintance with the dot and dash code to enable you to identify the many amateur and commercial stations which are constantly working with each other through the ether. And let me say right here that it is worth all the trouble it requires to learn this code, because then you can get into the long distance work and experience the genuine thrill that comes

to you when you first hear a station in Europe or South America. This hook-up which we give a No. 1 is not, however, suitable for the reception of stations working on the long commercial wave lengths. It is designed especially for amateur and concert transmitting waves.

It uses the same instruments which were given in our other two-variometer hook-up, but it places the variable condenser in a different position so many amateurs will find it more satisfactory than the other. I have been using it myself for some time with very good results.

The operating directions given for it other set apply to this one also. After all, such directions merely narrow themselves down to a matter of patient twisting your knobs until you find what you are after.

But let me again give the caution which is applicable to all hook-ups using an audio bulb. That is, do not put too much storage battery current into your bulb through the rheostat. Always operate the bulb with the filament at minimum brilliancy for strong signals.

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### Chester Physician Hurt by Auto

Chester, Pa., June 20. Dr. Fr. H. Evans, 218 West Fourth street, here, a narrow escape yesterday when a horse and carriage were run down by speeding touring car at Tenth street and Morton avenue. Dr. Evans was thrown to the street and suffered a fractured left arm and other injuries. The motorist saved away.

### Sues for \$750,000, Wins 12 Cents

Macon, Ga., June 20.—Glen Toot formerly Mayor, was awarded twelve cents damage yesterday by a Superior Court jury which heard his libel suit against the Macon Telegraph. He sued for \$750,000, alleging defamation of character in an article published May 31, 1921.

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